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ANSWER 16 OF 17 CAPLUS COPYRIGHT 2003 ACS on STN
L9
    1988:26970 CAPLUS
AN
    108:26970
DN
    Oral aqueous formulations containing bile acids and dextrins
TI
    Nakazawa, Shinzo; Kuno, Satoshi
IN
    Tokyo Tanabe Co., Ltd., Japan
PΑ
    Jpn. Kokai Tokkyo Koho, 7 pp.
SO
    CODEN: JKXXAF
DT
    Patent
    Japanese
LA
    ICM A61K031-575
IC
ICA A61K047-00
    63-6 (Pharmaceuticals)
CC
FAN.CNT 1
                   KIND DATE
                                       APPLICATION NO. DATE
    PATENT NO.
                         _____
    ______
                                        JP 1985-292933
                                                        19851227
                          19870708
ΡI
    JP 62153220
                     A2
    JP 04065051
                          19921016
                     B4
PRAI JP 1985-292933
                          19851227
    Oral liq. cholagogues contain bile acids and dextrins which control the
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Oral liq. cholagogues contain bile acids and dextrins which control the bitter taste of bile acids. Ursodeoxycholic acid 10 and Bu 4-hydroxybenzoate 1 g were dissolved in EtOH and its vol. adjusted to 100 mL. One mL of this was dispersed in a sterilized H2O 80 g, then 3 g of amylodextrin was added to give a transparent soln. To this soln. were added 350 mg of a licorice ext., 0.8 mL ginger ext., 1.5 mL fennel ext., 0.5 mL cinnamon ext., 130 mg ginseng ext., 0.1 mL plum flavor, 10 g D-glucose, and 0.5 g polyoxyethylene hydrogenated castor oil. The mixt. was filtered and the wt. adjusted to 100 g with H2O. The soln. was divided into 20 mL portions for an adult dosage.

ST bile acid cholagogue dextrin

IT Bile acids

RL: BIOL (Biological study)

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1984:549801 CAPLUS
    101:149801
DN
    Entered STN: 27 Oct 1984
ED
TI
    Manufacture of cholesterol oxidase
    Toyobo Co., Ltd., Japan
PA
    Jpn. Kokai Tokkyo Koho, 4 pp.
SO
    CODEN: JKXXAF
DT
    Patent
    Japanese
LA
IC
    C12N009-04
     16-4 (Fermentation and Bioindustrial Chemistry)
CC
FAN.CNT 1
                     KIND DATE
     PATENT NO.
                                           APPLICATION NO. DATE
     -----
                                           -----
     JP 59088087
                      A2
                            19840521
                                          JP 1982-197030 19821109
PΙ
                      B4 19850717
     JP 60030511
PRAI JP 1982-197030
                           19821109
    Cholesterol oxidase (I) [9028-76-6] is produced by fermn. and recovering
     from the cell mass by extg. with a soln. contg. anionic
     surfactants or a mixt. of the surfactant and bile acids or their
     salts. Thus, a preculture of Streptomyces capuensis was incubated in a pH
     7.2 medium contg. sol. starch 1.5, peptone 0.5, yeast
     ext. 0.4, meat ext. 0.2, CaCO3 0.2, K2HPO4 0.1, MgSO4.7H2O 0.05,
     FeSO4.7H2O 0.00 2, rice bran oil 1.0, and adekanol LG-126 0.2% at
     30.degree. for 2 days with aeration and stirring. The broth was extd.
     with a SDS [151-21-3] (0.12\%)-Na cholate [361-09-1] (0.10\%) mixt. (pH 7.0) at room temp. for 30 min and the ext. was centrifuged. The I titer
     in the supernatant fraction reached 3.76 units/mL; the I titer was
     2.96-3.28 units/mL when the broth was extd. with 0.06-0.12\% SDS, and was
     only 1.42 units/mL when extd. in the absence of surfactant and bile acids
     as their salts.
     surfactant Streptomyces cholesterol oxidase; bile acid Streptomyces
ST
     cholesterol oxidase; Streptomyces cholesterol oxidase manuf
IT
        (cholesterol oxidase extn. from Streptomyces capuensis with bile acid
        and)
IT
     Bile acids
     RL: BIOL (Biological study)
        (cholesterol oxidase extn. from Streptomyces capuensis with surfactant
IT
     Streptomyces capuensis
        (cholesterol oxidase manuf. with)
IT
     Fermentation
        (cholesterol oxidase, with Streptomyces capuensis)
IT
     151-21-3, biological studies
     RL: BIOL (Biological study)
        (cholesterol oxidase extn. from Streptomyces capuensis with bile acid
        and)
IT
     361-09-1
     RL: BIOL (Biological study)
        (cholesterol oxidase extn. from Streptomyces capuensis with surfactant
     9028-76-6P
IT
     RL: BMF (Bioindustrial manufacture); BIOL (Biological study); PREP
     (Preparation)
        (manuf. of, with Streptomyces capuensis)
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L13 ANSWER 20 OF 45 USPATFULL on STN

European Patent Application No. EP 111,841 A published Jun. 27, 1984, Derwent Abstract 84-159888/26, discloses nasal compositions comprising a nona- or deca-peptide or its salts having LHRH agonist or antagonist activity together with a bile acid or its salt as a surfactant in aqueous solution, the composition having greatly enhanced absorption across the nasal membrane. Representative of the LHRH analog is the compound represented by the formula

L13 ANSWER 26 OF 45 USPATFULL on STN

The active agent ursodeoxycholic acid has proved therapeutically active in infants, inter alia for the treatment of cholestatic hepatic diseases. A problem when administering this active agent, a bile acid, to infants is its extreme bitterness. As a result of the present invention a taste-acceptable, liquid administration form for ursodeoxycholic acid with an adequately high active agent concentration is described. The liquid to be ingested is a suspension prepared accompanied by the addition of a swelling and/or thickening agent, which contains the active agent mainly in fine crystalline form as the disperse phase and only in a much smaller proportion dissolved in the aqueous dispersant. A remaining residual bitterness can be additionally masked by the addition of .beta.-cyclodextrin or suitable taste correcting agents.

SUMM All bile acids, including ursodeoxycholic

acid, have an extremely bitter taste and an equally bitter after-taste lasting several hours. With the standard oral administration in the form of capsules or tablets it is admittedly possible to effectively conceal the bitter taste, but these administration forms are scarcely usable particularly in pediatrics, because infants cannot or can only with difficulty swallow capsules or tablets. In pediatrics preference is given to liquid administration forms, particularly in view of the fact that in the case of infants they can be better dosed in accordance with the body weight. Also in the case of liquid administration forms taste masking or concealing is possible, e.g. through the use of pellets. Pellets are small balls in which the active agent is enclosed and is consequently not in direct contact with the oral mucosa. The pellets are administered dispersed in suspensions. However, the production of pellets is complicated and expensive. They are very fragile, so that there is a risk of them being broken or bitten. In addition, it is generally only possible to have relatively small active agent quantities in each weight unit. In the case of ursodeoxycholic acid it is possible in this way to obtain a concentration of 20 to 30 mg/ml, whereas a concentration of approximately 50 mg/ml would be desirable. In order to be able to administer the ursodeoxycholic acid in a sufficiently high dosage (15 to 20 mg/kg of body weight and day), up to now there has been no taste masking in practice and instead a solution of the bile acid has been prepared in sodium bicarbonate, which has been administered by probe.

DETD By means of the homogenizing rod the active agent ursodeoxycholic acid and .beta.-cyclodextrin are successively incorporated portionwise therein.

DETD The ursodeoxycholic acid suspension is incorporated, accompanied by stirring, into the hydroxyethyl cellulose solution.

ACCESSION NUMBER: 96:60691 USPATFULL

TITLE: Ursodeoxycholic acid-containing medicament in a liquid

adminstration form

INVENTOR(S): Widauer, Josef O., Allschwil, Switzerland

PATENT ASSIGNEE(S): Medichemie AG, Bruhlstrasse, Switzerland (non-U.S.

corporation)

What is claimed is:

- 1. An clear aqueous solution comprising: (a) a first material selected from the group consisting of a bile acid, an aqueous soluble derivative of a bile acid, a bile acid salt, and a bile acid conjugated with an amine by an amide linkage; (b) a second material selected from the group consisting of dextran and liquid glucose; and (c) water, wherein the first and second materials both remain in solution for all pH values of the solution within a selected range of pH values and wherein the weight ratio of the second material to the first material is less than about 30:1.
- 2. An clear aqueous solution comprising: (a) a first material selected from the group consisting of a bile acid, an aqueous soluble derivative of a bile acid, a bile acid salt, and a bile acid conjugated with an amine by an amide linkage; (b) a second material selected from the group consisting of dextran and liquid glucose; and (c) water, wherein the first and second materials both remain in solution for all pH values of the solution within a selected range of pH values and wherein the concentration of the first material is more than about 1.17% (W/W).
- 3. An clear aqueous solution comprising: (a) a first material selected from the group consisting of a bile acid, an aqueous soluble derivative of a bile acid, a bile acid salt, and a bile acid conjugated with an amine by an amide linkage; (b) a second material selected from the group consisting of dextran and liquid glucose; and (c) water, wherein the first and second materials both remain in solution for all pH values of the solution within a selected range of pH values and wherein the concentration of the second material is more than about 35% (W/W).
- 7. The aqueous solution of claim 5 wherein the first material is ursodeoxycholic acid and the pharmaceutical compound is selected from the group consisting of metformin HCl, ranitidine HCl, cimetidine, lamivudine, cetrizine 2HCl, amantadine, rimantadine, sildenafil, apomorphine, yohimbine, trazodone, ribavirin, dexamethasone, hydrocortisone, prednisolone, triamcinolone, cortisone, niacin, catechin and its derivatives, taurine, vitamins, and naturally occurring amino acids.
- 13. The aqueous solution of any one of claims 1, 2 or 3 wherein the first material is selected from the group consisting of ursodeoxycholic acid, chenodeoxycholic acid, cholic acid, hyodeoxycholic acid, deoxycholic acid, 7-oxolithocholic acid, lithocholic acid, iododeoxycholic acid, iocholic acid, tauroursodeoxycholic acid, taurodeoxycholic acid, taurochenodeoxycholic acid, taurocholic acid, glycoursodeoxycholic acid, taurocholic acid, glycoursodeoxycholic acid, taurocholic acid, glycocholic acid, taurocholic acid, glycocholic acid glycocholic acid group on the steroid nucleus, their salts, or their conjugates with amines.
- 14. The aqueous solution of anM one of claims 1 or 2 wherein the bile acid salt is a product of the reaction of a bile acid and an amine.
- 15. The aqueous solution of claim 14 wherein the bile acid is selected from the group consisting of ursodexycholic acid, chenodeoxycholic

acid, cholic acid, hyodeoxycholic acid, deoxycholic acid, 7oxolithocholic acid, iododeoxycholic acid, iocholic acid, tauroursodexycholic acid, glycocholic acid, and their derivates at a hydroxyl or carboxylic acid group on the steroid nucleus.

- 17. The aqueous solution of any one of claims 1, 2 or 3 wherein the bile acid salt is a soluble metal salt of a bile acid or an aqueous soluble O-sulfonated bile acid.
- 33. A method of preparing an aqueous solution wherein the solution forms no precipitate at any pH value of the solution within a selected range of pH values comprising: (a) dissolving a bile acid, bile acid salt, or bile acid-amine conjugate in water to form a clear solution; (b) adding an aqueous soluble starch conversion product to the clear solution and allowing it to dissolve to form a clear solution; and (c) optionally adding a pharmaceutically effective amount of a pharmaceutical compound.

ACCESSION NUMBER:

2001:97453 USPATFULL

TITLE:

Preparation of aqueous clear solution dosage

forms with bile acids

INVENTOR(S):

Yoo, Seo Hong, 537 Spencer Dr., Wyckoff, NJ, United

States 07481

APPLICATION INFO.: US 1999-357549

19990720 (9)

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L24 ANSWER 49 OF 97 CAPLUS COPYRIGHT 2003 ACS on STN
AN
    1987:446073 CAPLUS
DN
    107:46073
ΕĎ
    Entered STN: 08 Aug 1987
ΤI
    Solubilization of cyclodextrin inclusion compounds
IN
    Sato, Mitsukatsu; Yagi, Yoshiaki; Nishimura, Masami; Ishikura, Tomoyuki
PΑ
    Sanraku Co., Ltd., Japan
    Jpn. Kokai Tokkyo Koho, 4 pp.
SO
    CODEN: JKXXAF
DT
    Patent
LΑ
    Japanese
    ICM A61K047-00
IC
    ICS A61K047-00
ICA A61K009-08
    62-4 (Essential Oils and Cosmetics)
CC
FAN.CNT 1
                   KIND DATE
    PATENT NO.
                                        APPLICATION NO. DATE
    ______
                                        -----
    JP 62072628 A2
JP 06021078 B4
                          19870403
                                        JP 1985-212198 19850927
PΙ
                          19940323
PRAI JP 1985-212198
                          19850927
    Sparingly sol. cyclodextrin inclusion compds. are made
    sol. by mixing with C6-18 satd. or unsatd. fatty acid Na salt, Na
    lauryl sulfate, Na cholic acid, or Na benzoate. Thus, 16 g
    .beta.-cyclodextrin was added to 30 mL H2O and mixed with 4 g of
    a perfume oil. The mixt. was stirred vigorously for 60 min and
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freeze-dried. A bath prepn. was prepd. contg. the inclusion compd. 5, Na2SO4 80, NaCl 13, and Na benzoate 2 parts by wt. This prepn. was added

at 1% (wt./vol.) to warm water, and rapid dissoln. was obsd.

cyclodextrin inclusion compd solubilization

ST

TT

Solubilization

SUMM The pharmaceutical compositions employed herein can comprise the litholytic bile acid-sucrose polyester agent alone, in combination with vitamins, anti-anal leakage agents, or both, either directly or in combination with any desired, non-interfering pharmaceutical carrier. As used herein, the term "pharmaceutical carrier" means a solid or liquid filler, diluent or encapsulating substance. Some examples of the substances which can serve as pharmaceutical carriers are sugars such as lactose, glucose and sucrose; starches such as corn starch and potato starch ; cellulose and its derivatives such as sodium carboxymethylcellulose, ethylcellulose and cellulose acetate; powdered tragacanth; malt; gelatin; talc; oils such as peanut oil, cottonseed oil, sesame oil, olive oil, corn oil and soybean oil; polyols such as propylene qlycol, glycerin, sorbitol, mannitol and polyethylene glycol; agar; alginic acid; pyrogen-free water; isotonic saline; ethyl alcohol and phosphate buffer solutions, as well as other non-toxic compatible substances used in pharmaceutical formulations. Wetting agents and lubricants such as sodium lauryl sulfate, as well as coloring agents, flavoring agents and preservatives can also be present in the compositions, according to the desires of the formulator.

CLM What is claimed is:

- 1. A composition for prevention and treatment of radiolucent gallstones, comprising: (a) a safe and effective amount of a non-absorbable, non-digestible polyol fatty acid polyester wherein the polyol is esterified with at least four fatty acid groups; and (b) a safe and effective amount of a litholytic bile acid.
- 2. A composition according to claim 1 wherein the litholytic bile acid is selected from the group consisting of chenodeoxycholic acid, ursodeoxycholic acid, and their pharmaceutically-acceptable salts, and mixtures thereof.
- 3. A composition for prevention and treatment of radiolucent gallstones, comprising: (a) a non-absorbable, non-digestible liquid polyol fatty acid polyester wherein the polyol is esterified with at least four fatty acid groups; (b) a safe and effective amount of a litholytic bile acid; and (c) sufficient anti-anal leakage agent to prevent leakage of said liquid polyester through the anal sphincter.
- 4. A composition according to claim 3 wherein the litholytic bile acid is selected from the group consisting of chenodeoxycholic acid, ursodeoxycholic acid, and their pharmaceutically-acceptable salts, and mixtures thereof.
- 8. A composition according to claim 7 wherein the litholytic bile acid is selected from the group consisting of chenodeoxycholic acid, ursodeoxycholic acid, and their pharmaceutically-acceptable salts, and mixtures thereof.
- 14. A method according to claim 13 wherein the composition administered further comprises a safe and effective amount of a litholytic bile acid.
- 15. A method according to claim 13 which further comprises the concurrent administration of a composition comprising a safe and effective amount of a litholytic bile acid.
- 16. A method according to claim 14 or 15 wherein the litholytic bile acid is selected from the group consisting of chenodeoxycholic acid, ursodeoxychloic acid, and their pharmaceutically-acceptable salts, and mixtures thereof.

ACCESSION NUMBER: 81:23339 USPATFULL

TITLE: Gallstone dissolution compositions and method

INVENTOR(S): Jandacek, Ronald J., Cincinnati, OH, United States

PATENT ASSIGNEE(S): The Procter & Gamble Company, Cincinnati, OH, United

States (U.S. corporation)

NUMBER KIND DATE

PATENT INFORMATION: US 4264583 19810428

APPLICATION INFO.: US 1979-60538 19790725 (6)

DOCUMENT TYPE: Utility FILE SEGMENT: Granted

PRIMARY EXAMINER: Roberts, Elbert L.

LEGAL REPRESENTATIVE: Roth, Michael J., Goldstein, Steven J., Witte, Richard

C.

NUMBER OF CLAIMS: 19 EXEMPLARY CLAIM: 1,13 LINE COUNT: 723

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

SPATFULL on STN

AB Improved bioavailability, particularly when the drug is administered orally, of the active ingredient 2-hydroxy-5-methyllaurophenoxime (HMLO) of a pharmaceutical preparation is achieved by improving the absorption of the active ingredient HMLO significantly by including bile acids in the preparation. As bile acids, it is possible to use, for example, desoxychloic acid or dehydrocholic acid or a mixture of the two in the form of their salts.

DETD The active ingredient HMLO can be formulated with the bile acid or the mixture of bile acids in the form of solutions, suspensions, capsules, granulates, tablets or sugar-coated pills; preferably, it is formulated in the form of granulates or tablets.

Por this purpose, the HMLO active ingredient is advisably mixed homogeneously with the salt of the bile acid or acids and the usual tableting auxiliaries, such as lactose, potato starch and sugar, and subsequently granulated with a polyvinyl alcohol solution. The granulate obtained is dried, screened and mixed with appropriate lubricants and flow regulators, such as calcium stearate and talc. The granulate obtained can either be administered directly or pressed into tablets.

CLM What is claimed is:

- 1. A pharmaceutical preparation comprising a mixture of 2-hydroxy-5-methyllaurophenoxime as an active ingredient and at least one **bile acid** as an absorption agent, the molar ratio of **bile acids** to 2-hydroxy-5-methyllaurophenoxime being from 0.1:1 to 10:1.
- 2. A pharmaceutical preparation according to claim 1 in which the at least one **bile acid** is selected from the group consisting of desoxycholic acid, dehydrocholic acid and salts of desoxycholic acid and dehydrocholic acid.
- 3. A pharmaceutical preparation according to claim 2 in which the molar ratio of **bile acids** to 2-hydroxy-5-methyllaurophenoxime is from 0.5:1 to 1:0.5.

ACCESSION NUMBER:

92:1619 USPATFULL

TITLE:

Composition and methods for providing optimum

bioavailability of the active ingredient 2-hydroxy-5-methyllaurophenoxime (HMLO)

INVENTOR(S):

Lucke, Lothar, Magdeburg, German Democratic Republic Fries, Gerhard, Magdeburg, German Democratic Republic Voigt, Gunter, Magdeburg, German Democratic Republic Neubert, Reinhard, Halle, German Democratic Republic Furst, Walter, Halle-Neustadt, German Democratic

Republic

Slapke, Jurgen, Schwanebeck, German Democratic Republic Schewe, Tankred, Berlin, German Democratic Republic

Fabriken, Magdeburg,

VEB Fahlberg-List Chemische und pharmazeutische Fabriken, Magdeburg, German Democratic Republic

(non-U.S. corporation)

NUMBER KIND DATE

PATENT INFORMATION:

PATENT ASSIGNEE(S):

US 5079265 19920107

APPLICATION INFO.:

US 1990-476193 19900207 (7)

NUMBER DATE

PRIORITY INFORMATION:

DD 1989-3269784 19890329

DOCUMENT TYPE: FILE SEGMENT: Utility 1989-3289/84 1989032

Granted

- 65 to about 90% w/w of an enzyme selected from the group consisting of pancreatic proteases, lipases, nucleases and amylase; (ii) from about 0.3 to about 13% w/w of a buffered micronized bile acid, said buffer selected from the group consisting of sodium and potassium carbonate and bicarbonate, ammonium carbonate, tromethamine, ethanolamine, diethanolamine and triethanolamine, said buffer/bile acid forming a mixture of a 1 to 1 neutralization equivalent ratio; (iii) a buffering agent selected from the group consisting of from about 0.25 to about 5.0% w/w sodium carbonate (anhydrous), sodium bicarbonate, potassium carbonate, potassium bicarbonate and ammonium carbonate, and from about 0.25 to about 1.5% w/w, tromethamine, diethanolamine and triethanolamine; (iv) of from about 3.0 to about 19% w/w of an adhesive polymer selected from the group consisting of polyvinylpyrrolidone, cellulose acetate phthalate, and a 60:40 blend of hydroxypropylmethyl cellulose, and ethyl cellulose; (v) of from about 0.5 to about 16% w/w a disintegrant selected from the group consisting of starch, modified starches, microcrystalline cellulose and propylene glycol alginate; b) wetting said blended ingredients with a liquid to cause the blend to stick together, wherein said liquid is selected from the group consisting of: 1%-25% w/w ethanol/75%-99% w/w 2-propanol/0.2%-2.5% w/w water; 98%-99% w/w 2-propanol/0.2%-2.0% w/w water; 1%-25% w/w methanol/0.2%-2.5% w/w water/75%-98% w/w 2 propanol/1%-5% w/w ethylacetate; c) granulating or extruding the liquid-wetted blend through a 10 or 18 mesh standard sleve screen; d) converting the granules to a uniform diameter particle size; e) compacting the uniform particles to spherical particles; f) drying the spherical particles under drying conditions not exceeding 35.degree. C. and 40% relative humidity; g) separating the spherical particles if not of uniform size according to desired sizes using U.S. Standard sieve screens; h) coating the particles with from about 7.0 to about 15% of a gastric acid-resistant polymer that disintegrates under neutral or slightly basic conditions selected from the group consisting of hydroxypropyl methyl cellulose phthalate, cellulose acetate phthalate, an aqueous enteric coating polymer dispersion and an acrylic based polymeric dispersion; and i) drying the polymer-coated spherical particles under drying conditions not exceeding 35.degree. C. and 40% relative humidity.
 - 7. The digestive enzyme/buffered **bile acid** compositions for the treatment of digestive enzyme/ursodeoxycholic deficient mammals prepared by the process of claim 1.
 - 8. A process for preparing a digestive enzyme/bufferedursodeoxycholic acid composition for the treatment of digestive enzymes/ursodeoxycholic acid deficient mammals comprising the steps of: a) preparing a starting seed of the buffered-ursodeoxycholic acid comprising: micropulverizing the buffered-ursodeoxycholic acid in a centrifugal grinder or an impact pulverizer, blending the resultant micronized buffered-ursodeoxycholic acid with a disintegrant and a buffering agent; b) spraying said blend with a solution of the adhesive polymer until the blend agglomerates; c) granulating or extruding the liquid-wetted blend through a 10 or 18 mesh Standard Sleve screen; d) converting the granules to a uniform diameter particle size of 40 to 60 mesh; e) compacting the uniform particles to spherical particles; f) drying the spherical particles; g) separating the spherical particles if not of uniform size according to desired sizes using U.S. Standard sieve screens; h) using said 40 to 60 mesh particles as starting seeds for the preparation of larger microspheres; placing the 40-60 mesh starting seeds in a rotating coating pan, wetting the microspheres with the liquid/adhesive polymer-containing mixture followed by slowly dusting the buffered-UDCA/buffer/disintegrant composition over the tumbling and flowing buffered-UDCA seed until the desired particles sizes are

obtained; i) coating the particles with a gastric acid-resistant polymer that dissolves under neutral or slightly basic conditions; and j) drying the polymer coated spherical particles.

ACCESSION NUMBER:

94:30856 USPATFULL

TITLE:

Preparation of gastric acid-resistant microspheres containing digestive enzymes and buffered-bile acids

INVENTOR(S):

Sipos, Tibor, Lebanon, NJ, United States

PATENT ASSIGNEE(S):

Digestive Care Inc., Lebanon, NJ, United States (U.S.

corporation)

NUMBER KIND DATE -----PATENT INFORMATION: US 5302400 19940412

APPLICATION INFO.: US 1992-901758

19920622 (7

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L24 ANSWER 50 OF 97 CAPLUS COPYRIGHT 2003 ACS on STN
     1986:448922 CAPLUS
AN
     105:48922
DN
     Entered STN: 09 Aug 1986
ED
     Interaction of .beta.-cyclodextrin with bile salts in aqueous solutions
ΤI
     Miyajima, Koichiro; Yokoi, Masayuki; Komatsu, Hiroaki; Nakagaki, Masayuki
ΑU
     Fac. Pharm. Sci., Kyoto Univ., Kyoto, 606, Japan
CS
SO
     Chemical & Pharmaceutical Bulletin (1986), 34(3), 1395-8
     CODEN: CPBTAL; ISSN: 0009-2363
DT
     Journal
LA
     English
CC
     63-5 (Pharmaceuticals)
     .beta.-Cyclodextrin (.beta.-CD) [7585-39-9] forms inclusion
AB
     complexes with bile salts (Na cholate, Na deoxycholate, Na
     qlycocholate, and Na taurocholate) in aq. solns. In the
     presence of bile salts, the guest mols. of .beta.-CD complexes
     are excluded from the cavity of .beta.-CD and the free mols. increase with
     the concn. of bile salt up to the crit. micelle concn. (cmc).
     Above the cmc they are partitioned between the aq. and micellar phases.
     Below the cmc the exchange reaction proceeds depending on the formation
     consts. of the guest mol. of .beta.-CD and the concn. of bile salt. Above
     cmc, the free mols. in aq. phase decrease with increasing concn. of bile
     salt because of the partitioning to the micellar phase. These results may
     be related to the absorption of .beta.-CD complexes administered orally
     and also to the metab. of cholesterol when the complexes are administered
     orally for a long period of time.
ST
     cyclodextrin bile salt inclusion complex
IT
     Micelles
        (crit. concn. of, bile salt-.beta.-cyclodextrin inclusion complex
        host-guest properties in relation to)
IT
     Bile salts
     RL: SPN (Synthetic preparation); PREP (Preparation)
        (inclusion complexes with cyclodextrins, prepn. and properties of)
     Formation constant and Stability constant
IT
        (of bile salt inclusion compds. with .beta.-cyclodextrin)
IT
     82-76-8
               23731-35-3
     RL: PRP (Properties)
        (partition of, between .beta.-cyclodextrins and bile salts)
IT
     7585-39-9DP, inclusion compds. with bile salts
                                                      103419-26-7P
     103419-27-8P
                  103419-28-9P
                                  103419-29-0P
     RL: SPN (Synthetic preparation); PREP (Preparation)
        (prepn. and host-guest exchange properties of)
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L24 ANSWER 57 OF 97 CAPLUS COPYRIGHT 2003 ACS on STN
AN
    1981:103689 CAPLUS
DN
     94:103689
ED
    Entered STN: 12 May 1984
    Inclusion compds of cholic acids and their injections
ΤI
    Kawagishi, Juichi
IN
PA Tokyo Tanabe Co., Ltd., Japan
    Jpn. Kokai Tokkyo Koho, 6 pp.
so
    CODEN: JKXXAF
DT
    Patent
LA
    Japanese
    C07J009-00; A61K009-08; C08B037-16; A61K031-575
IC
CC
     32-6 (Steroids)
     Section cross-reference(s): 33
FAN.CNT 1
                   KIND DATE
    PATENT NO.
                                         APPLICATION NO. DATE
     -----
                                         _____
PI JP 55022616 A2 19800218
PRAI JP 1978-94600 19780804
                                         JP 1978-94600 19780804
     Inclusion compds. of .beta.-cyclodextrin with cholic,
AB
     dehydrocholic, deoxycholic, ketodeoxycholic, and ursodeoxycholic acids
     were prepd. Thus, 1.00 g ursodeoxycholic acid suspended in H2O was
     treated with 4.05 g .beta.-cyclodextrin and the resulting clear
     soln. distd. at 60.degree. under reduced pressure to give 5.02 g
     an inclusion compd. of ursodeoxycholic acid with .beta.-
     cyclodextrin. Pharmaceutical injections contg. these inclusion
     compds. were described.
ST
     inclusion compd cyclodextrin cholic acid
IT
     Inclusion compounds
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (cyclodextrin-cholic acids)
IT
     Steroids, preparation
     RL: SPN (Synthetic preparation); PREP (Preparation)
        (prepn. of, of inclusion compds. of cholic acid derivs. with
       cyclodextrin)
IT
     Pharmaceuticals
        (injections, cholic acid-cyclodextrin inclusion compds.)
     75639-24-6P 75639-25-7P 75639-26-8P 75639-27-9P 75639-28-0P
IT
     RL: SPN (Synthetic preparation); PREP (Preparation)
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(prepn. of)

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L24 ANSWER 75 OF 97 CAPLUS COPYRIGHT 2003 ACS on STN
AN
     1962:33281 CAPLUS
DN
     56:33281
OREF 56:6355f-q
     Entered STN: 22 Apr 2001
     Activity of bile amylase
TI
     Adunts, G. T.; Nersesyan, R. R.
ΑU
SO
     Izvestiya Akademii Nauk Armyanskoi SSR, Biologicheskie Nauki (1961),
     14 (No. 8), 47-53
     CODEN: IABNAW; ISSN: 0367-6579
DT
     Journal
     Unavailable
LA
CC
     59 (Enzymes)
     cf. CA 55, 18828e.-Chicken, chick embryo, and sheep bile were
AB
     used. The reaction mixt. consisted of 1 ml. amylase (I) dild. 1:50, 5 ml.
     1.2% starch soln., 1 ml. 0.5M NaCl soln.
     The pH optimum of the I of sheep bile was 6.81. The activity of
     I drops up to 85% after incubation for 10 min. at 45.degree. and is
     completely destroyed at 60.degree.. I of sheep bile is more thermolabile
     than I from human saliva.
     Bile
IT
        (amylase in)
     9000-91-3, Amylase, .beta.-
IT
        (in bile)
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24 ANSWER 84 OF 97 CAPLUS COPYRIGHT 2003 ACS on STN
AN 1930:27485 CAPLUS
DN 24:27485
OREF 24:2899d-e
ED Entered STN: 16 Dec 2001
TI
    Washing textile materials
IN Willis, N. E.
DT
   Patent
LA Unavailable
CC 25 (Dyes and Textile Chemistry)
FAN.CNT 1
    PATENT NO.
                 KIND DATE APPLICATION NO. DATE
    GB 321729 19280721 GB
PΙ
    GB 321729
AB
    In scouring wool or washing artificial silk or other materials, a dil. aq.
    soln. having a pH between 7.5 and 11 is used contg. a small
    proportion of a water-sol. carbohydrate (such as glucose,
    sol. starch, sucrose or hemi-cellulose), a protein such
    as blood albumin, ox-gall or bile, gelatin or Irish moss, and
    alk. buffer salts such as Na2PO4, borax or (NH4)2CO3 and an antiseptic.
IT
    Textiles
       (filling)
IT
    Wool
       (scouring, washing or cleaning of)
ΙT
    Rayon
    Textiles
       (washing)
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L24 ANSWER 92 OF 97 CAPLUS COPYRIGHT 2003 ACS on STN
AN
     1910:11153 CAPLUS
DN
     4:11153
OREF 4:2003i,2004a-b
     Entered STN: 16 Dec 2001
     The Influence of Bile Salts on the Pancreatic Digestion of Starch
ΤI
ΑU
     Buglia., G.
     Physiol. Inst.; Univ. Naples
CS
SO
     Biochemische Zeitschrift (1910), 25, 239-56
     CODEN: BIZEA2; ISSN: 0366-0753
DT
     Journal
     Unavailable
LA
     11 (Biological Chemistry)
CC
     The rate at which starch solns. were hydrolyzed was measured by
AΒ
     detn. of the reducing sugar formed, and of the decrease in viscosity of
     the solns. It was found that, while the rate of sugar formation
     increases with the conc. of starch and of enzyme, it does not
     increase in proportion to either of these concs., so the curves of the
     rate of hydrolysis have no simple logarithmic character. Bile salts increased the diastatic activity of the pancreatin. The effect of
     the bile salts was greatest when they were present in optimum cone. This
     conc. varied with the conditions of the expts. from 0.1-0.5%. It is
     suggested that the activating effect of the bile salts upon the
     pancreatic diastase may be connected with the effect of the salts in
     lowering the surface tension of the starch solns.
IT
     Bile salts
        (effect on pancreatic digestion of starch)
     935-13-7, 2-Furanpropionic acid
IT
        (behavior in animal body)
```

(pancreatic digestion of, influence of bile salts on)

IT

9005-25-8, Starch